

SMA SPDT PIN Diode Switch From 20 MHz to 1,000 MHz Rated at 150 Watts

The FMSW2040 is a single pole double throw (SPDT) PIN diode switch that operates over the frequency range of 20 MHz to 1000 MHz. The 50 ohm design supports TTL control logic and is rated up to 150 watt average RF input power. Typical performance includes 0.75 dB insertion loss and greater than 40 dB isolation. Switching speed is 40 microseconds with 1.4:1 typical VSWR and an operating voltage of +15 Vdc with 250 mA nominal current. The rugged package design supports SMA Female RF input/output connectors. The Switch design is highly reliable with an operational temperature of 0°C to +70°C.



Electrical Specifications

TTL Control Logic

Off/Isolation: "0" 0 to V
On/Low Loss: "1"

Description	Min	Typ	Max	Units
Frequency Range	20		1,000	MHz
Impedance		50		Ohms
VSWR			1.4:1	
Insertion Loss		0.756		dB
Switching Time			40	µs
Input Power (CW)			150	Watts
Positive Operating Voltage		15		Vdc
Current @ 15 Vdc		250		mA
Operating Temperature	0		+70	deg C

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	20 to 500	500 to 1,000				MHz
Insertion Loss, Max	0.5	0.75				dB
Isolation, Min	50	40				dB

Mechanical Specifications

Weight 0.5475 lbs [248.34 g]
Design Reflective, SPDT
RF Connector SMA Female

Environmental Specifications

Temperature

Operating Range 0 to +70 deg C
Storage Range -55 to +90 deg C

ESD Sensitivity ESD Sensitive Material. Transport material in Approved ESD bags. Handle only in ESD Workstation.



Features:

- SPDT High Power PIN Diode Switch
- 150 watt (CW)
- Reflective Design
- 20 to 1000 MHz Bandwidth
- Insertion loss: 0.75 dB max
- Isolation: 40 dB min
- 50 Ohms
- Switching Speed: 40 microseconds
- DC voltage: +15 Vdc
- SMA female connectors
- TTL Control Logic

Applications:

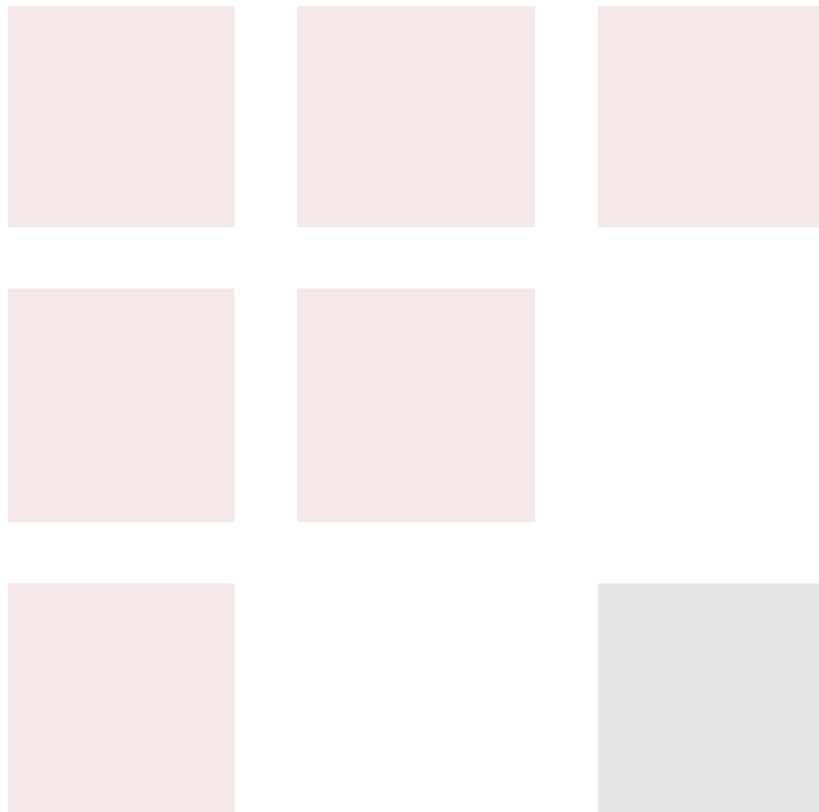
- Electronic Warfare
- Test & Measurement
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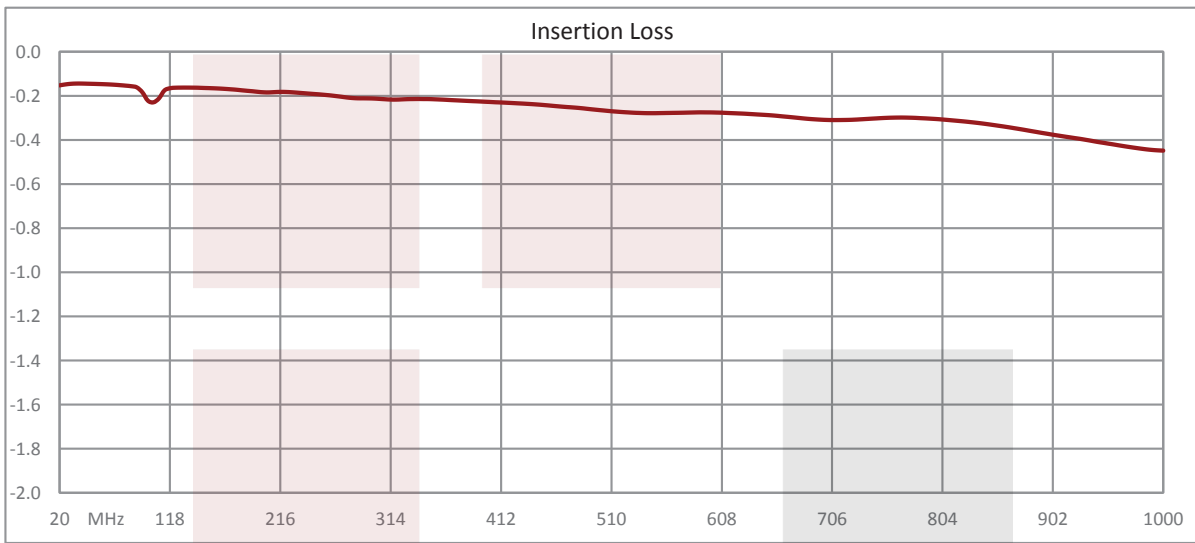
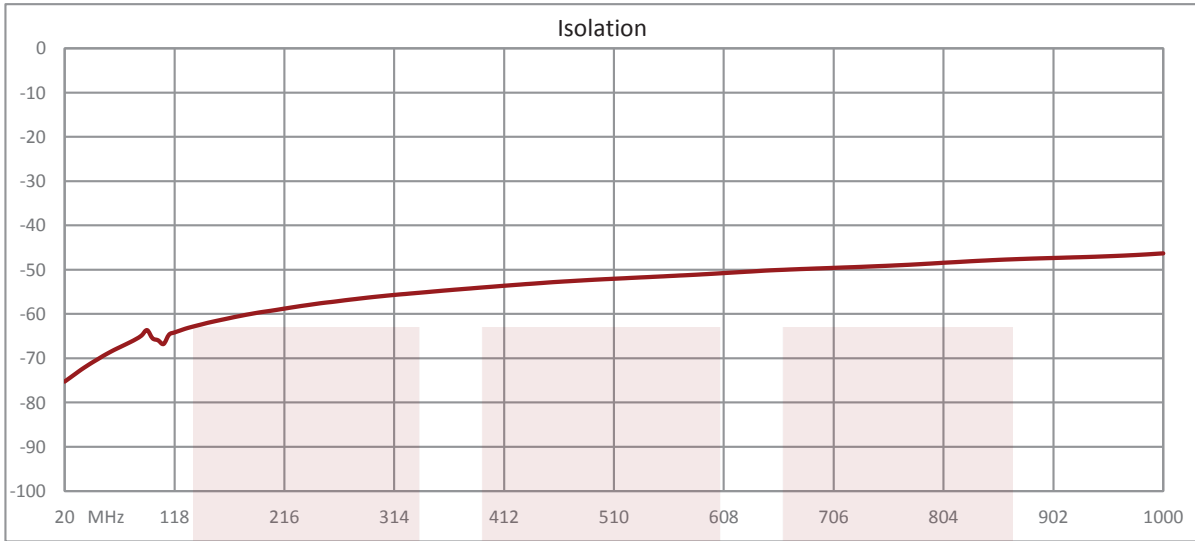
Compliance Certifications (see [product page](#) for current document)

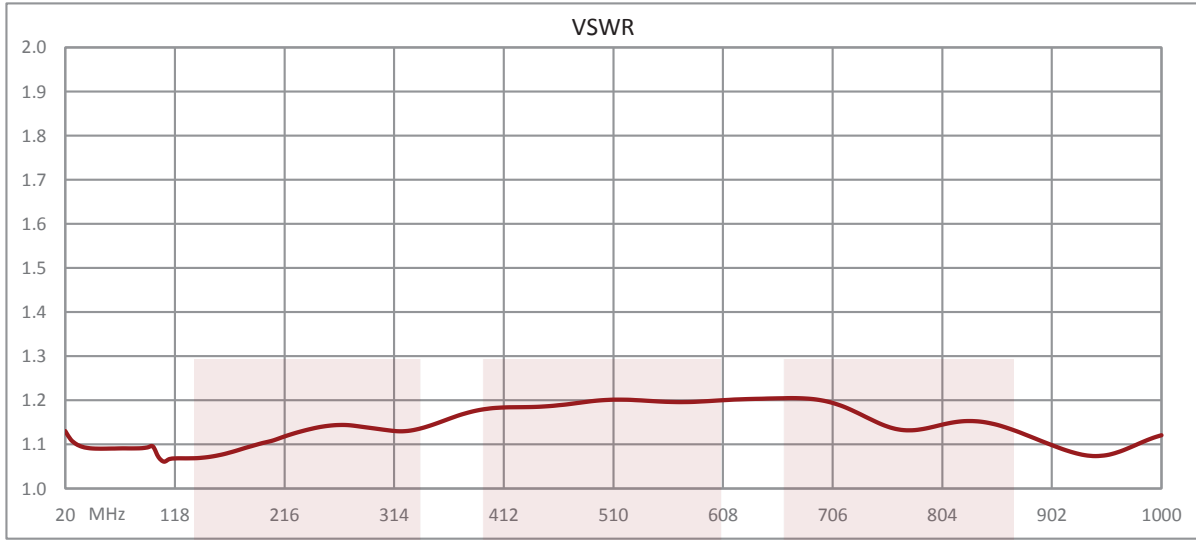
Plotted and Other Data

Notes:



Typical Performance Data



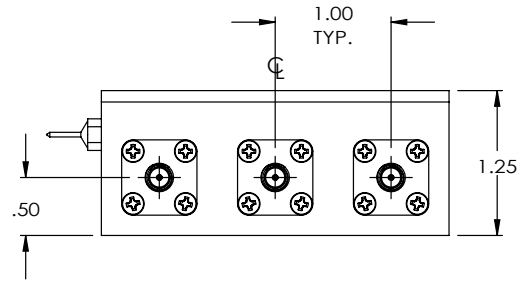
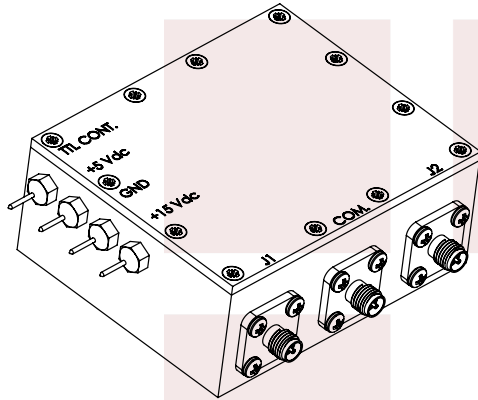
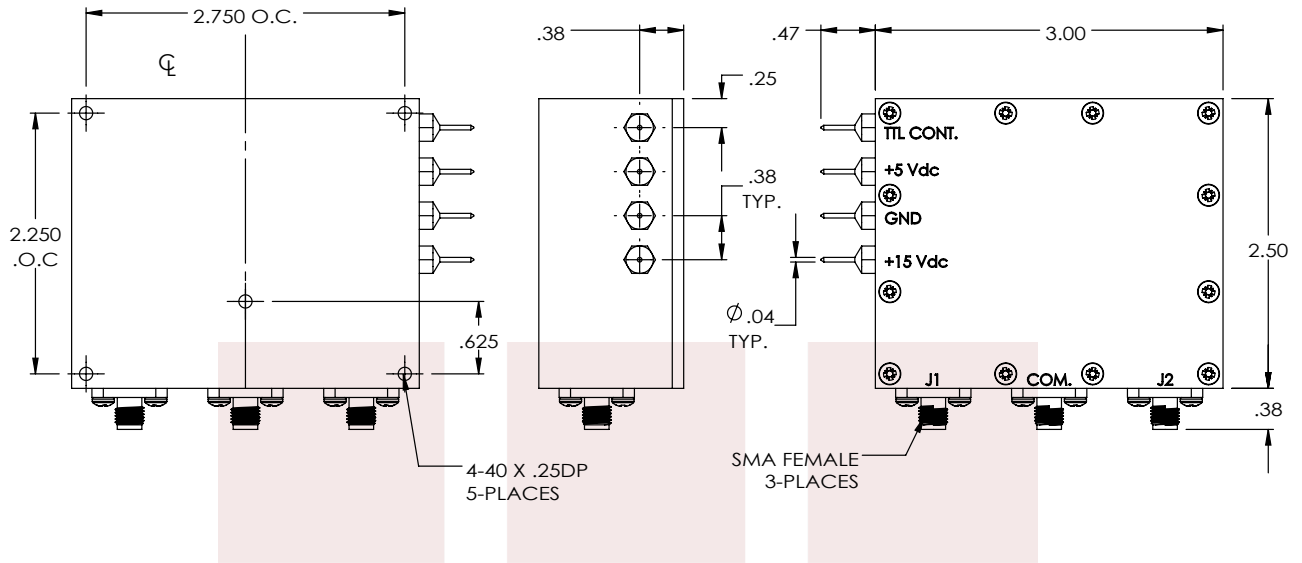


SMA SPDT PIN Diode Switch From 20 MHz to 1,000 MHz Rated at 150 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA SPDT PIN Diode Switch From 20 MHz to 1,000 MHz Rated at 150 Watts FMSW2040](#)

URL: <https://www.fairviewmicrowave.com/sma-spdt-pin-diode-switch-1000-mhz-150-watts-fmsw2040-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



NOTES:
 TTL LOW=COMMON TO J1
 TTL HIGH=COMMON TO J2

STANDARD TOLERANCES	
.XX	±0.010
.XXX	±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

FAIRVIEW MICROWAVE INC. ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].		
TITLE	DWG NO FMSW2040	CAGE CODE 3FKR5		
SMA SPDT PIN Diode Switch From 20 MHz to 1,000 MHz Rated at 150 Watts	CAD FILE 052917	SHEET	SCALE N/A	SIZE A 1408